

$f_2(2300)$

$I^G(J^{PC}) = 0^+(2^{++})$

$f_2(2300)$ MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
2297±28	¹ ETKIN	88	MPS $22 \pi^- p \rightarrow \phi\phi n$
• • • We do not use the following data for averages, fits, limits, etc. • • •			
2270±12	VLADIMIRSK...06	SPEC	$40 \pi^- p \rightarrow K_S^0 K_S^0 n$
2327± 9±6	ABE	04	BELL $10.6 e^+ e^- \rightarrow e^+ e^- K^+ K^-$
2240±15	ANISOVICH	00J	SPEC $p\bar{p} \rightarrow \pi^0 \pi^0 \eta$
2231±10	BOOTH	86	OMEG $85 \pi^- Be \rightarrow 2\phi Be$
2220^{+90}_{-20}	LINDENBAUM	84	RVUE
2320±40	ETKIN	82	MPS $22 \pi^- p \rightarrow 2\phi n$

¹ Includes data of ETKIN 85. The percentage of the resonance going into $\phi\phi 2^{++} S_2$, D_2 , and D_0 is 6^{+15}_{-5} , 25^{+18}_{-14} , and 69^{+16}_{-27} , respectively.

$f_2(2300)$ WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
149±41	² ETKIN	88	MPS $22 \pi^- p \rightarrow \phi\phi n$
• • • We do not use the following data for averages, fits, limits, etc. • • •			
90±29	VLADIMIRSK...06	SPEC	$40 \pi^- p \rightarrow K_S^0 K_S^0 n$
275±36±20	ABE	04	BELL $10.6 e^+ e^- \rightarrow e^+ e^- K^+ K^-$
241±30	ANISOVICH	00J	SPEC $p\bar{p} \rightarrow \pi^0 \pi^0 \eta$
133±50	BOOTH	86	OMEG $85 \pi^- Be \rightarrow 2\phi Be$
200±50	LINDENBAUM	84	RVUE
220±70	ETKIN	82	MPS $22 \pi^- p \rightarrow 2\phi n$

² Includes data of ETKIN 85.

$f_2(2300)$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \phi\phi$	seen
$\Gamma_2 K\bar{K}$	seen
$\Gamma_3 \gamma\gamma$	seen

$f_2(2300) \Gamma(i)\Gamma(\gamma\gamma)/\Gamma(\text{total})$

$$\Gamma(K\bar{K}) \times \Gamma(\gamma\gamma)/\Gamma_{\text{total}} \quad \Gamma_2\Gamma_3/\Gamma$$

VALUE (eV)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
44±6±12	³ ABE	04	BELL $10.6 e^+ e^- \rightarrow e^+ e^- K^+ K^-$

³ Assuming spin 2.

$f_2(2300)$ REFERENCES

VLADIMIRSK...	06	PAN 69 493 Translated from YAF 69 515.	V.V. Vladimirsy <i>et al.</i>	(ITEP, Moscow)
ABE	04	EPJ C32 323	K. Abe <i>et al.</i>	(BELLE Collab.)
ANISOVICH	00J	PL B491 47	A.V. Anisovich <i>et al.</i>	
ETKIN	88	PL B201 568	A. Etkin <i>et al.</i>	(BNL, CUNY)
BOOTH	86	NP B273 677	P.S.L. Booth <i>et al.</i>	(LIVP, GLAS, CERN)
ETKIN	85	PL 165B 217	A. Etkin <i>et al.</i>	(BNL, CUNY)
LINDENBAUM	84	CNPP 13 285	S.J. Lindenbaum	(CUNY)
ETKIN	82	PRL 49 1620	A. Etkin <i>et al.</i>	(BNL, CUNY)

OTHER RELATED PAPERS

ANISOVICH	05	JETPL 80 715 Translated from ZETFP 80 845.	V.V. Anisovich	
ANISOVICH	05A	JETPL 81 417 Translated from ZETFP 81 531.	V.V. Anisovich, A.V. Sarantsev	
ANISOVICH	05C	IJMP A20 6327	V.V. Anisovich, M.A. Matveev, A.V. Sarantsev	
LONGACRE	04	PR D70 094041	R.S. Longacre, S.J. Lindenbaum	
AMELIN	00	NP A668 83	D. Amelin <i>et al.</i>	(VES Collab.)
BOLONKIN	00	JETPL 72 166 Translated from ZETFP 72 240.	B.V. Bolonkin <i>et al.</i>	
BARBERIS	98	PL B432 436	D. Barberis <i>et al.</i>	(Omega Expt.)
LANDBERG	96	PR D53 2839	C. Landberg <i>et al.</i>	(BNL, CUNY, RPI)
GREEN	86	PRL 56 1639	D.R. Green <i>et al.</i>	(FNAL, ARIZ, FSU+)
BOOTH	84	NP B242 51	P.S.L. Booth <i>et al.</i>	(LIVP, GLAS, CERN)
EISENHAND...	75	NP B96 109	E. Eisenhandler <i>et al.</i>	(LOQM, LIVP, DARE+)